Please amend the paragraph beginning at page 7, line 16, as follows:

Metallic pads 2, for example in gold or in silver, are formed on the surface of a

support 1. The support 1 may be of any nature: in dielectric material (for example in glass),

semiconductor (for example in silicon) or metallic (for example a thin layer of gold deposited

on a glass plate). The pads are distributed according to a two dimensional matrix. They are

capable of adsorbing, on their upper face, chemical or biological species 3 such as strands of

DNA.

Please amend the paragraph beginning at page 15, line 28, as follows:

In the case of a fluorescent particle, the presence of biochemical species modifies the

intensity and the fluorescence lifetime of this particle. Thus, depending on the presence or not

of the species 13 sought, the characteristics of the fluorescence radiation of the particle 20 are

modified. The sensitivity of the fluorescence detection may be reinforced by the presence of

pads 16 12 if the plasmon resonance wavelength of these pads is adjusted to the fluorescence

absorption or emission wavelength of the particle 20. The fluorescent particle 20 may also be

used to reinforce the modification of the plasmon resonance of the pads 16 12 induced by the

species 13.

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